

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Amended herein) A method for processing a transport stream, the
2 method comprising:
3 (a) parsing the transport stream to derive multiple elementary substreams, each
4 elementary substream including a received media access control (MAC) address; and
5 (b) comparing in hardware the received MAC address of a particular elementary
6 substream against a plurality of stored MAC addresses, each stored MAC address having (i) a
7 concatenated disable bit, and (ii) at least one independent compare mask assigned to it that
8 masks a portion of the MAC address bits from the comparison when the disable bit is
9 inactivated;
10 (c) comparing any unmasked bits of the received MAC address against
11 corresponding unmasked bits of the comparison MAC address;
12 (d) comparing the disable bit with each of the bits in the compare mask to
13 determine if the mask has been disabled for the remaining bits of the MAC addresses;
14 (e) comparing the remaining bits of the received MAC address with the
15 corresponding bits of the comparison MAC address when the mask has been disabled; and
16 (f) repeating steps (c)-(e) for each of the received MAC addresses until a
17 match is achieved between each received MAC address and a particular comparison MAC
18 address.

1 2. (Original) The method according to claim 1, the method further comprising:
2 (a) parsing the transport stream to derive multiple data streams including
3 associated program identifiers, each such data stream being associated with a plurality of the
4 multiple elementary substreams;

5 (b) using the associated program identifiers and MAC addresses to determine
6 corresponding transfer locations in a host memory; and

7 (c) performing direct memory access transfers of the multiple data streams and
8 multiple elementary substreams to the corresponding transfer locations in the host memory.

1 3. (Original) The method according to claim , the method further comprising
2 transferring the multiple data streams and multiple elementary substreams to an end user system.

1 4. (Original) The method according to claim wherein the end user system
2 comprises an audio-visual system and the step of transferring the multiple data streams and
3 multiple elementary substreams is performed through an audio-visual interface.

1 5. (Original) The method according to claim wherein the end user system
2 comprises a networked computer system and the step of transferring the multiple data streams
3 and multiple elementary substreams is performed through a network interface.

1 6. (Original) The method according to claim wherein the end user system
2 further comprises a world wide web browser.

1 7. (Original) The method according to claim , the method further comprising
2 the step of filtering out unwanted elementary substreams associated with a particular data stream.

Claims 8-9 (Canceled).

1 10. (Amended herein) The method according to claim 18 wherein the
2 received MAC address comprises 48 bits and each of the stored MAC addresses comprises 48
3 bits.

1 11. (Amended herein) A system for receiving and processing a transport
2 stream, the system comprising:

3 (a) a receiver configured to derive multiple elementary substreams, each
4 elementary substream including a received media access control (MAC) address having a
5 concatenated disable bit; and

6 (b) at least one independent stored compare mask assigned to each stored
7 MAC address that masks a portion of the MAC address bits from the comparison when the
8 disable bit is inactivated;

9 (c) a hardware comparison engine within the receiver, the hardware comparison
10 engine being configured to compare the received MAC address of a particular data stream
11 against a plurality of stored MAC addresses.

12 (i) compare any unmasked bits of the received MAC address against
13 corresponding unmasked bits of the comparison MAC address;

14 (ii) compare the disable bit with each of the bits in the compare mask
15 to determine if the mask has been disabled for the remaining bits of the MAC addresses;

16 (iii) compare the remaining bits of the received MAC address with the
17 corresponding bits of the comparison MAC address when the mask has been disabled; and

18 (iv) repeat steps (i)-(iii) for each of the received MAC addresses until a
19 match is achieved between each received MAC address and a particular comparison MAC
20 address.

1 12. (Original) The system according to claim , the system further comprising
2 a direct memory access (DMA) transfer engine within the receiver, wherein the receiver is
3 further configured to derive multiple data streams and associated program identifiers from the
4 transport stream, each such data stream being associated with a plurality of the multiple
5 elementary substreams, and wherein the DMA transfer engine is configured to initiate DMA
6 transfers of the multiple data streams and multiple elementary substreams to the corresponding
7 transfer locations in a host memory.

1 13. (Original) The system according to claim , the system further comprising
2 an interface connected to the receiver configured to transfer the multiple data streams and
3 multiple elementary substreams to an end user system.

1 14. (Original) The system according to claim wherein the end user system
2 comprises an audio-visual system and interface comprises an audio-visual interface.

1 15. (Original) The system according to claim wherein the end user system
2 comprises a networked computer system and the interface comprises a network interface.

1 16. (Original) The system according to claim wherein the end user system
2 further comprises a world wide web browser.

1 17. (Original) The system according to claim wherein the hardware
2 comparison engine is further configured to filter out unwanted elementary substreams associated
3 with a particular data stream.

Claims 18-19 (Canceled).

1 20. (Original) The system according to claim wherein the received MAC
2 address comprises 48 bits and each of the stored MAC addresses comprises 48 bits.

1 21. (New) The method according to claim 1 wherein the comparison of
2 unmasked bits in step (d) is implemented with an XNOR gate.

1 22. (New) The method according to claim 1 wherein step (d) is implemented
2 with an AND gate by comparing the disable bit with each of the masked bits and controlled with
3 an OR gate, which restricts the comparison of the masked bits to instances where the disable bit
4 has been activated.